

I claim:

1. A method of configuring resources in an IA-32 computer, comprising:
establishing a remap window at the top of physical memory, the remap window
5 corresponding to a PCI memory address range below 4GB; and
reporting to an operating system that a portion of the remap window is reserved, the
reserved portion corresponding to an AGP aperture within the PCI memory
address range.

10 2. The method of claim 1, further comprising:
reporting to the operating system that the remainder of the remap window is usable
memory.

3. A method of configuring resources in an IA-32 computer, comprising:
setting a REMAPBASE register to the top of physical memory, and a REMAPLIMIT
register to the value in the REMAPBASE register plus the size of a PCI
memory address range;
5 determining a translated AGP aperture address corresponding to the lower end of an
AGP aperture minus the address of the top of lower memory plus the value in
the REMAPBASE register; and
in response to queries from an operating system to a BIOS, reporting at least three
memory ranges as follows: a first usable range beginning at 4GB and ending
10 at the translated AGP aperture address; a reserved range beginning at the top
of the first usable range and having a size equal to AGP aperture; and a second
usable range beginning at the top of the reserved range and ending at the value
in the REMAPLIMIT register.

4. A machine-readable storage or transmission medium containing code that, when executed on a computer, causes the computer to perform a method of configuring IA-32 computer resources, the method comprising:

establishing a remap window at the top of physical memory, the remap window
5 corresponding to a PCI memory address range below 4GB; and
reporting to an operating system that a portion of the remap window is reserved, the reserved portion corresponding to an AGP aperture within the PCI memory address range.

10 5. The storage or transmission medium of claim 4, wherein the method further comprises:

reporting to the operating system that the remainder of the remap window is usable memory.

6. A machine-readable storage or transmission medium containing code that, when executed on a computer, causes the computer to perform a method of configuring IA-32 computer resources, the method comprising:

5 setting a REMAPBASE register to the top of physical memory, and a REMAPLIMIT register to the value in the REMAPBASE register plus the size of a PCI memory address range;

determining a translated AGP aperture address corresponding to the lower end of an AGP aperture minus the address of the top of lower memory plus the value in the REMAPBASE register; and

10 in response to queries from an operating system to a BIOS, reporting at least three memory ranges as follows: a first usable range beginning at 4GB and ending at the translated AGP aperture address; a reserved range beginning at the top of the first usable range and having a size equal to AGP aperture; and a second usable range beginning at the top of the reserved range and ending at the value
15 in the REMAPLIMIT register.